

REMARKS

This amendment is in response to the Office Action dated February 9, 2005. Claims 1-44 have been examined in the Application, and have been rejected. In this amendment Applicants have amended claims 2, 12, 22, and 35 to more clearly align the claims with the specific embodiments they represent.

Allowable Subject Matter

The Examiner has stated that claims 6 and 16 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims are amended herein and have been rewritten in independent form as suggested by the Examiner.

Reply to Drawing Objections

The Examiner has objected to the labeling in FIG. 6 of the drawings. Specifically the Examiner objects to the use of the label 106 on two different elements. Fig. 6 has been amended to correct this deficiency. A copy of the corrected Fig. 6 is attached to this amendment.

Reply to Specification Objections

The Examiner objects to page 26, lines 17 and 18, and page 26 line 20 of the specification as being unclear by referring to octets as cells. Applicants respectfully disagree. Elements 150 and 152 are each unambiguously labeled and comprise cells as stated in the specification.

Reply to Claim Objections

The Examiner has objected to the use of the terms "transmission line" and "transmission link" in claims 1 and 11 referring to their use as inconsistent and lacking clarity. Applicants have amended claims 1 and 11 as suggested by the Examiner.

Reply to 35 U.S.C. 112 Rejections

The Examiner has rejected claims 2-5, 8,9, 12-15, 18, 19, 22-26, 32, 33, 35-37, 43 and 44 under 35 U.S.C. 112. The Examiner asserts that the claims contain subject matter that is not covered by the specification because the claims are directed toward multiple, mutually exclusive embodiments. In response, Applicants have amended claims 2, 12, 22, and 35 to more clearly align the claims with the specific embodiments they represent.

Reply to 35 U.S.C. 102 Rejections

The Examiner has rejected claims 1-5, 7, 11-15, 17, 20-26, and 28-31 under 35 U.S.C. 102 as being unpatentable over Song (U.S. P. 6,289,018). The Examiner asserts that with respect to claims 1, 2, 4, 5, 7, 11, 12, 14, 15, 17 and 20 Song discloses the method of the present invention. Applicants respectfully disagree with the Examiner's characterization of Song and its application to the present invention.

Song discloses an ATM switching system adapted to multiplex a plurality of calls by assembling them into cells to improve bandwidth efficiency. To achieve this end, Song discloses an ATM switching system comprising a subscriber input module with a 2B+D frame handler for splitting 2B+D channel data output from an N-ISDN subscriber into B-channel data and D-channel data, and multiplexing the split B- and D-channel data to corresponding highways.

Song further discloses a first time switch module for sorting the channel data on the respective highways by time slots corresponding to destination time switch module numbers, and switching channel stream data grouped by destinations to the respective highways; and a first input CLAD for collecting voice data output from the time switch module by destinations to assemble an ATM cell. The trunk input module includes a frame handler for splitting frame data output from an N-ISDN trunk into B-channel data and D-channel data, and multiplexing the split B- and D-channel data to respective highways; a second time switch module for sorting the channel data on the respective highways by time slots corresponding to destination time switch module numbers, and switching channel stream data grouped by destinations to the respective highways; and a

second input CLAD for collecting voice data output from the second time switch module by destinations to assemble an ATM cell.

The ATM switch having input ports connected to the subscriber input module and the trunk input module and output ports connected to the subscriber output module and the trunk output module, self-routes the ATM cell input from the subscriber input module and the trunk input module to switch the ATM cell to a corresponding destination. The subscriber output module, having a same construction as that of the subscriber input module, handles, in reverse order, the ATM cell output from the ATM switch and outputs the handled ATM cell to another N-ISDN subscriber. The trunk output module, having a same construction as that of the trunk input module, handles, in reverse order, the ATM cell output from the ATM switch and outputs the handled ATM cell to another N-ISDN trunk. Thus the method in song is characterized by taking narrowband channel data from a subscriber, separating and grouping (by destination) B- and D-channel data into respective highways and further assembling voice data (by destination) via a CLAD to assemble an ATM cell comprising the extracted voice data, and B- and D-channel groupings.

In contrast thereto, independent claims 1, 2, 11, 12, and 22 of the present invention are directed to a method wherein narrowband transmissions are converted to ATM cells by separating data and signaling portions of the narrowband transmission into separate byte positions in each composite ATM cell and transferring the composite ATM cells along with broadband transmissions over a transmission link, thereby making all bandwidth available for both broadband and narrowband transmissions.

Song does not teach the separation of narrowband transmissions into data and signaling portions occupying separate byte positions as does the present invention, nor does it teach the simultaneous transmission of broadband and narrowband data over a transmission link. Accordingly, Song does not anticipate independent claims 1, 2, 11, 12, and 22 of the present invention and these claims are therefore patentable. Dependent claims 3-5, 7, 12-15, 17, 20, 21, 23-26 and 28-31 are also patentable at least by virtue of their dependence on patentable independent claims 1, 2, 11, 12, and 22.

Reply to 35 U.S.C. 103 Objections

The Examiner has rejected claims 8, 9, 18, 19, 32 and 33 under 35 U.S.C. 103 (a) as being unpatentable over Song in view of Hiller et al. (U.S.P. 5,327,421). The Examiner contends that Hiller discloses a system where a plurality of narrowband telephony channels and their associated messages are converted into ATM cells and when taken in combination with Song, discloses the invention disclosed in claims 8, 9, 18, 19, 32 and 33.

Applicants respectfully disagree with the Examiners characterization of the combination of Hiller and Song. As discussed with respect to the Examiners 35 U.S.C. 102 claim rejections above, Song does not teach or disclose a technique that includes converting narrowband transmissions to and from composite asynchronous transfer mode (ATM) cells by **separating data and signaling portions** of the narrowband transmissions **into separate byte positions in each of** the converted composite ATM cells. Hiller likewise does not teach these features and is instead directed to conversion of a signal stream into ATM cells. It does not describe a technique of **separating data and signaling portions** of the narrowband transmissions **into separate byte positions in each of** the converted composite ATM cells as claimed in the present invention. Thus the combination of Onno and Hiller does not teach or suggest the present invention as claimed and does not render claims 8, 9, 18, 19, 32 and 33 obvious.


The Examiner has rejected claims 43 and 44 under 35 U.S.C. 103(a) as being unpatentable over Song in view of Stevenson and further in view of Hiller. The Examiner states that neither Song nor Stevenson disclose the composite ATM cell information disclosed in claims 43 and 44 but that Hiller makes up the deficiencies in Song and Stevenson. Applicants respectfully disagree with the Examiner's characterization of these references. As stated above with respect to the Examiner's rejection of claims 8, 9, 18, 19, 32 and 33, Song does not teach or disclose a technique that includes converting narrowband transmissions to and from composite asynchronous transfer mode (ATM) cells by **separating data and signaling portions** of the narrowband transmissions **into separate byte positions in each of** the converted composite ATM cells. The combination of Song Stevenson and Hiller does not teach or

suggest these recitations and, therefore does not teach or suggest the subject matter claimed in claims 43 and 44. Moreover claims 43 and 44 are patentable at least by virtue of their dependence on patentable independent claim 34.

Request for Reconsideration pursuant to 37 CFR 1.111

Having responded to each and every ground for objection and rejection in the Office Action mailed on February 9, 2005, Applicant requests reconsideration in the instant application pursuant to 37 CFR 1.111 and requests that the Examiner pass the application to issue. Applicants carry forward arguments made in each previous response as if fully set forth herein. If there is any point requiring further attention prior to allowance, the Examiner is asked to contact Applicants' counsel who can be reached at the telephone number listed below.

Respectfully,
Charles C. Byers
Mary D. Miller
Shella A. Paskel
James P. Runyon
John Tardy
John D. Unruh

By 
Claude R. Narcisse
Reg. No. 38979
(212) 801-3190

DATE: August 3, 2005